

## CHAPTER CONTENTS

## Multi-Lab

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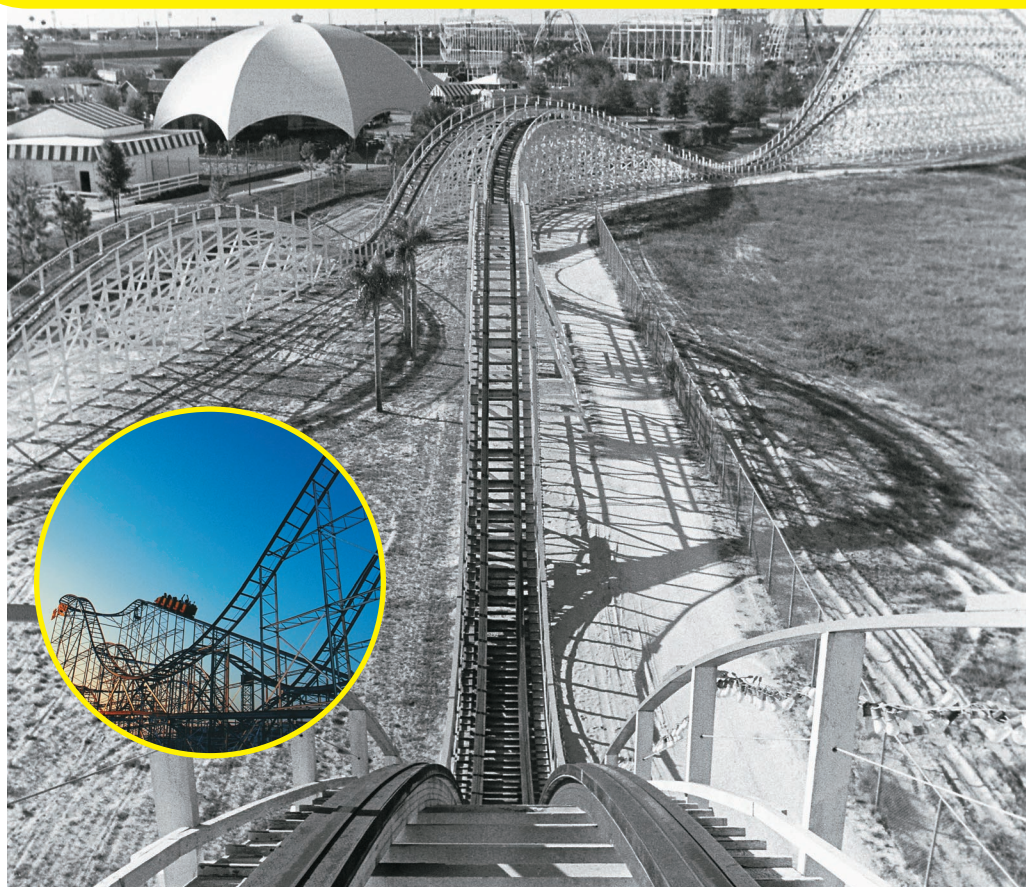
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an Incline 46PREREQUISITE  
CONCEPTS AND SKILLS

- Using the kinematic equations for uniformly accelerated motion.



**H**ow many times have you heard the saying, “It all depends on your perspective”? The photographers who took the two pictures of the roller coaster shown here certainly had different perspectives. When you are on a roller coaster, the world looks and feels very different than it does when you are observing the motion from a distance. Now imagine doing a physics experiment from these two perspectives, studying the motion of a pendulum, for example. Your results would definitely depend on your perspective or frame of reference. You can describe motion from any frame of reference, but some frames of reference simplify the process of describing the motion and the laws that determine that motion.

In previous courses, you learned techniques for measuring and describing motion, and you studied and applied the laws of motion. In this chapter, you will study in more detail how to choose and define frames of reference. Then, you will extend your knowledge of the dynamics of motion in a straight line.